

SEQUENCE LISTING



<110> Pasternack, Gary
Kocheavar, Gerald
Brody, Jonathan
Kadkol, Shrihari
The Johns Hopkins University

<120> Gene Family with Transformation Modulating Activity

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<210> 11
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 <212> DNA
 <213> Homo sapiens

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tcttgcaact cacatatctc gacagctggt actgggacca caaggaggcc ccttactcag	540
atattgaggc ccacgtggag ggcctggatg acgaggagga gggtagcat gaggaggagt	600
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gagaacctga agatgaggga gaagatgatg actaagtaga ataacctatt ttgaaaaatt 840
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<210> 12
<211> 907
<212> DNA
<213> Homo sapiens

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<210> 13
<211> 907
<212> DNA
<213> Homo sapiens

<400> 13
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tagatgacga ggaagatgaa gaagagcttg gtgaagaaga aaggggtcag aagcgaaaac	780
gagaacctga agatgagga gaagatgatg actaagtga ataacctatt ttgaaaaatt	840
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<210> 14
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 <212> DNA
 <213> Homo sapiens

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gaagaggagg acgtgagtgg agaggaggag gaggatgaag aaggttataa cgatggagag	720
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<210> 15
<211> 907
<212> DNA
<213> Homo sapiens

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gagaacctga agatgaggga gaagatgatg actaagtga ataacctatt ttgaaaaatt 840
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<210> 16
<211> 907
<212> DNA
<213> Homo sapiens

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<210> 17
<211> 907
<212> DNA
<213> Homo sapiens

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<210> 18
 <211> 907
 <212> DNA
 <213> Homo sapiens

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Ab
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<210> 19
 <211> 907
 <212> DNA
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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atgatgaaga tgctcaggta atggaagatg aggaggacga ggatgaggag gaggaacgtg	660
aagaggagga cgtgagtggg gacgaggagg agaaggatga aggttataac aatggagagg	720
tagatgatga ggaagatgaa gaagagcttg gtgaagaaga aaggggtcag aagcgaaaat	780
aagaaactga agatgaggga gaagacgatg cctaagtgga ataatctatt ttgaaaaatt	840
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gtgaaagaac ttgtcctgga caacagtcgg tcgaatgaag gcaaactcga aggcctcaca	180
gatgaatttg aagaactgga attcttaagt acaatcaacg taggcctcac ctcaatcgca	240
aacttaccaa agttaacaaa acttaagaag cttgaactaa gcgataacag agtctcaggg	300
ggcctggaag tattggcaga aaagtgtccg aacctcacgc atctaaattt aagtggcaac	360
aaaattaaag acctcagcac aatagagcca ctgaaaaagt tagaaaacct caagagctta	420
gaccttttca attgcgagggt aaccaacctg aacgactacc gagaaaatgt gttcaagctc	480
ctcccgcaac tcacatatct cgacggctat gaccgggacg acaaggaggc ccctgactcg	540
gatgctgagg gctacgtgga gggcctggat gatgaggagg aggatgagga tgaggaggag	600
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gaagaggagg acgtgagtgg agaggaggag gaggatgaag aagggtataa cgatggagag	720
gtagatgacg aggaagatga agaagagctt ggtgaagaag aaaggggtca gaagcgaaaa	780

cgagaacctg aagatgaggg agaagatgat gactaagtgg aataacctat ttgaaaaat 840
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 cccctgaa 908

<210> 26
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 26

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
 35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Val Ser Gly Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
 100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asp Tyr Arg Glu Asn Val Phe Lys Leu Leu Pro Gln Leu Thr Tyr
 130 135 140

Leu Asp Gly Tyr Asp Arg Asp Asp Lys Glu Ala Pro Asp Ser Asp Ala
 145 150 155 160

Glu Gly Tyr Val Glu Gly Leu Asp Asp Glu Glu Glu Asp Glu Asp Glu
 165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Asp Glu
 180 185 190

Asp Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Glu Glu Glu
195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
225 230 235 240


Pro Glu Asp Glu Gly Glu Asp Asp Asp
245

<210> 27
<211> 249
<212> PRT
<213> Homo sapiens

<400> 27

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
20 25 30

 Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Asp Asn Arg Val Ser Gly Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Asn Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
115 120 125

Asn Asp Tyr Arg Glu Asn Val Phe Lys Leu Leu Pro Gln Leu Thr Tyr
130 135 140

Leu Asp Gly Tyr Asp Arg Asp Asp Lys Glu Ala Pro Asp Ser Asp Ala
145 150 155 160

Glu Gly Tyr Val Glu Gly Leu Asp Asp Glu Glu Glu Asp Glu Asp Glu
165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Asp Glu
180 185 190

Asp Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Glu Glu Glu
195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
225 230 235 240

Pro Glu Asp Glu Gly Glu Asp Asp Asp
245

<210> 28
<211> 131
<212> PRT
<213> Homo sapiens

<400> 28

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Gly Thr Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Ala Ser Val Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
115 120 125

Asn Asn Tyr
130

<210> 29
<211> 131
<212> PRT
<213> Homo sapiens

<400> 29

Met Glu Met Gly Lys Trp Ile His Leu Glu Leu Arg Asn Arg Thr Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Phe Leu Asp Asn Ser Gln Ser Asn Glu Gly
20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Leu Leu Asn
35 40 45

Thr Ile Asn Ile Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Ala Ser Val Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
115 120 125

Asn Asn Tyr
130

<210> 30
<211> 249
<212> PRT
<213> Homo sapiens

<400> 30

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro

<210> 31
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 31

Met Glu Met Gly Lys Trp Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Phe Leu Asp Asn Ser Gln Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Leu Leu Asn
 35 40 45

Thr Ile Asn Ile Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Ala Ser Val Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
 100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asn Tyr Arg Glu Asn Val Phe Lys Leu Leu Pro Gln Leu Thr Tyr
 130 135 140

Leu Asp Gly Tyr Asp Arg Asp Asp Lys Glu Ala Pro Asp Ser Asp Ala
 145 150 155 160

Glu Gly Tyr Val Glu Gly Leu Asp Asp Glu Glu Glu Asp Glu Asp Glu
 165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Asp Glu
 180 185 190

Asp Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Glu Glu Glu
 195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
 210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
 225 230 235 240

Pro Glu Asp Glu Gly Glu Asp Asp Asp
 245

<210> 32
 <211> 238
 <212> PRT
 <213> Homo sapiens

<400> 32

Met Glu Met Gly Arg Arg Ile His Ser Glu Leu Arg Asn Arg Ala Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Ala Leu Asp Asn Ser Arg Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Ala Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
 35 40 45

Lys Ile Asn Gly Gly Leu Thr Ser Ile Ser Asp Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Arg Lys Leu Glu Leu Ser Ser Asn Arg Val Ser Gly Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Tyr Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Gln Leu
 100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asp Tyr Gly Glu Asn Val Phe Lys Leu Leu Leu Gln Leu Thr Tyr
 130 135 140

Leu Asp Ser Cys Tyr Trp Asp His Lys Glu Ala Pro Tyr Ser Asp Ile
 145 150 155 160

Glu Asp His Val Glu Gly Leu Asp Asp Glu Glu Glu Gly Glu His Glu
 165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Gly Glu
 180 185 190

Glu Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Gly Asp Gly
 195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Gly Glu Glu Asp
 210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys
 225 230 235

<210> 33
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 33

Met Glu Met Gly Lys Trp Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Phe Leu Asp Asn Ser Gln Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Leu Leu Asn
 35 40 45

Thr Ile Asn Ile Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Ala Ser Val Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
 100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asn Tyr
 130

<210> 34
<211> 238
<212> PRT
<213> Homo sapiens

<400> 34

Met Glu Met Gly Arg Arg Ile His Ser Glu Leu Arg Asn Arg Ala Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
20 25 30

Lys Leu Glu Ala Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
35 40 45

Lys Ile Asn Gly Gly Leu Thr Ser Ile Ser Asp Leu Pro Lys Leu Asn
50 55 60

Lys Leu Arg Lys Leu Glu Leu Ser Ser Asn Lys Val Ser Gly Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Tyr Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Gln Leu
100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
115 120 125

Asn Asp Tyr Gly Glu Asn Val Phe Lys Leu Leu Leu Gln Leu Thr Tyr
130 135 140

Leu Asp Ser Cys Tyr Trp Asp His Lys Glu Ala Pro Tyr Ser Asp Ile
145 150 155 160

Glu Asp His Val Glu Gly Leu Asp Asp Glu Glu Glu Gly Glu His Glu
165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Gly Glu
180 185 190

Glu Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Gly Asp Glu
195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Gly Glu Glu Asp
210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys
 225 230 235

<210> 35
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 35

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
 35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Arg Lys Leu Glu Leu Ser Ser Asn Arg Val Ser Gly Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Tyr Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Gln Leu
 100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asp Tyr Gly Glu Asn Val Phe Lys Leu Leu Leu Gln Leu Thr Tyr
 130 135 140

Leu Asp Ser Cys Tyr Trp Asp His Lys Glu Ala Pro Tyr Ser Asp Ile
 145 150 155 160

Glu Asp His Val Glu Gly Leu Asp Asp Glu Glu Glu Gly Glu His Glu
 165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Gly Glu
 180 185 190

Glu Gly Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Gly Asp Glu
 195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
 210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
 225 230 235 240

Pro Glu Asp Glu Gly Glu Asp Asp Asp
 245

<210> 36
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 36

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Val Asn Ser Arg Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
 35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
 50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Asp Asn Arg Val Ser Gly Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Asn Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
 100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asp Tyr Arg Glu Asn Val Phe Lys Leu Leu Pro Gln Leu Thr Tyr
 130 135 140

Leu Asp Gly Tyr Asp Arg Asp Asp Lys Glu Ala Pro Asp Ser Asp Ala
 145 150 155 160

Glu Gly Tyr Val Glu Gly Leu Asp Asp Glu Glu Glu Asp Glu Asp Glu
165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Asp Glu
180 185 190

Asp Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Glu Glu Glu
195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
225 230 235 240

Pro Glu Asp Glu Gly Glu Asp Asp Asp
245

<210> 37
<211> 131
<212> PRT
<213> Homo sapiens

<400> 37

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Asp Asn Arg Val Ser Gly Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asn Tyr
 130

<210> 38
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 38

Met Glu Met Gly Lys Trp Ile His Leu Glu Leu Arg Asn Arg Thr Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Phe Leu Asp Asn Ser Gln Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Gly Leu Ala Asp Glu Phe Glu Glu Leu Glu Leu Leu Asn
 35 40 45

Thr Ile Asn Ile Gly Leu Ser Ser Ile Ala Asn Leu Ala Lys Leu Asn
 50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Ser Asn Arg Ala Ser Val Gly Leu
 65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Ile His Leu Asn Leu Ser
 85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
 100 105 110

Glu Asn Leu Glu Ser Leu Asp Leu Phe Thr Cys Glu Val Thr Asn Leu
 115 120 125

Asn Asn Tyr
 130

<210> 39
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 39

Met Glu Met Gly Arg Arg Ile His Ser Glu Leu Arg Asn Arg Ala Pro
 1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
 20 25 30

Lys Leu Glu Ala Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
 35 40 45

Lys Ile Asn Gly Gly Leu Thr Ser Ile Ser Asp Leu Pro Lys Leu Lys
 50 55 60

Leu Arg Lys Leu Glu Leu Lys Val Ser Gly Gly Leu Glu Val Leu Ala
 65 70 75 80

Glu Lys Cys Pro Asn Leu Thr His Leu Tyr Leu Ser Gly Asn Lys Ile
 85 90 95

Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Gln Leu Glu Asn Leu Lys
 100 105 110

Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu Asn Asp Tyr Gly
 115 120 125

Glu Asn Val Phe Lys Leu Leu Leu Gln Leu Thr Tyr Leu Asp Ser Cys
 130 135 140

Tyr Trp Asp His Lys Glu Ala Pro Tyr Ser Asp Ile Glu Asp His Val
 145 150 155 160

Glu Gly Leu Asp Asp Glu Glu Glu Gly Glu His Glu Glu Glu Tyr Asp
 165 170 175

Glu Asp Ala Gln Val Val Glu Asp Glu Glu Gly Glu Glu Glu Glu Glu
 180 185 190

Glu Gly Glu Glu Glu Asp Val Ser Gly Gly Asp Glu Glu Asp Glu Glu
 195 200 205

Gly Tyr Asn Asp Gly Glu Val Asp Gly Glu Glu Asp Glu Glu Glu Leu
 210 215 220

Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys
 225 230

<210> 40
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 40

Met Glu Met Gly Arg Arg Ile His Leu Glu Leu Arg Asn Arg Thr Pro
1 5 10 15

Ser Asp Val Lys Glu Leu Val Leu Asp Asn Ser Arg Ser Asn Glu Gly
20 25 30

Lys Leu Glu Gly Leu Thr Asp Glu Phe Glu Glu Leu Glu Phe Leu Ser
35 40 45

Thr Ile Asn Val Gly Leu Thr Ser Ile Ala Asn Leu Pro Lys Leu Asn
50 55 60

Lys Leu Lys Lys Leu Glu Leu Ser Asp Asn Arg Val Ser Gly Gly Leu
65 70 75 80

Glu Val Leu Ala Glu Lys Cys Pro Asn Leu Thr His Leu Asn Leu Ser
85 90 95

Gly Asn Lys Ile Lys Asp Leu Ser Thr Ile Glu Pro Leu Lys Lys Leu
100 105 110

Glu Asn Leu Lys Ser Leu Asp Leu Phe Asn Cys Glu Val Thr Asn Leu
115 120 125

Asn Asp Tyr Arg Glu Asn Val Phe Lys Leu Leu Pro Gln Leu Thr Tyr
130 135 140

Leu Asp Gly Tyr Asp Arg Asp Asp Lys Glu Ala Pro Asp Ser Asp Ala
145 150 155 160

Glu Gly Tyr Val Glu Gly Leu Asp Asp Glu Glu Glu Asp Glu Asp Glu
165 170 175

Glu Glu Tyr Asp Glu Asp Ala Gln Val Val Glu Asp Glu Glu Asp Glu
180 185 190

Asp Glu Glu Glu Glu Gly Glu Glu Glu Asp Val Ser Gly Glu Glu Glu
195 200 205

Glu Asp Glu Glu Gly Tyr Asn Asp Gly Glu Val Asp Asp Glu Glu Asp
210 215 220

Glu Glu Glu Leu Gly Glu Glu Glu Arg Gly Gln Lys Arg Lys Arg Glu
225 230 235 240

Pro Glu Asp Glu Gly Glu Asp Asp Asp
245

<210> 41
<211> 26
<212> DNA
<213> Homo sapiens


<400> 41
tatgctagcg ggttcggggg ttattg 26

<210> 42
<211> 29
<212> DNA
<213> Homo sapiens

<400> 42
gattctagat ggtaagtttg cgattgagg 29

<210> 43
<211> 29
<212> DNA
<213> Homo sapiens

<400> 43
gaatctagaa ggaggaggaa ggtgaagag 29

 <210> 44
<211> 29
<212> DNA
<213> Homo sapiens

<400> 44
ctatctagat tcagggggca ggattagag 29

<210> 45
<211> 24
<212> DNA
<213> Homo sapiens

<400> 45
gaggtttatt gattgaattc ggct 24

<210> 46
<211> 24
<212> DNA
<213> Homo sapiens

<400> 46
ccccagtaca cttttcccgt ctca 24

<210> 47

<211> 17
<212> DNA
<213> Homo sapiens

<400> 47
gggttcgggg tttattg

17

<210> 48
<211> 20
<212> DNA
<213> Homo sapiens

<400> 48
ctctaatacct gccccctgaa

20

<210> 49
<211> 12
<212> DNA
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<220>
<223> Recognition sequence

<400> 49
tttttctttt tc

12

Ab
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<210> 50
<211> 10
<212> DNA
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<220>
<223> Recognition Sequence

<400> 50
ttaaaattca

10

<210> 51
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Recognition Sequence

<400> 51
atgtaaaaca

10

<210> 52
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Recognition Sequence

<400> 52
aagataaaaac c

11

<210> 53
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Recognition Sequence

<400> 53
ccactgggga

10

<210> 54
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> Recognition Sequence

<400> 54
ctctctctct ctc

13

Ab
7
<210> 55
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Recognition Sequence

<400> 55
aaaacataaa t

11